

=> FILE REG

FILE 'REGISTRY' ENTERED AT 11:38:30 ON 03 DEC 2008
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=> DISPLAY HISTORY FULL L1-

FILE 'HCAPLUS' ENTERED AT 10:10:28 ON 03 DEC 2008

L1 3700 SEA DEANGELIS ?/AU OR DE ANGELIS ?/AU OR ANGELIS ?/AU
L2 31 SEA POLLESEL ?/AU
L3 181 SEA BELLUSSI ?/AU
L4 1645 SEA LOCKHART ?/AU
L5 0 SEA L1 AND L2 AND L3 AND L4
L6 0 SEA L2 AND L3 AND L4
L7 0 SEA L3 AND L4
L8 35423 SEA DISPOS?/TI
L9 135174 SEA SULFUR#/TI
L10 91 SEA L8 AND L9
L11 0 SEA L10 AND ((L1 OR L2 OR L3 OR L4))

FILE 'REGISTRY' ENTERED AT 10:56:26 ON 03 DEC 2008

E SULFUR/CN
L12 1 SEA SULFUR/CN
L13 238 SEA S/ELS AND 1/ELC.SUB
E HYDROGEN SULFIDE/CN
L14 1 SEA "HYDROGEN SULFIDE"/CN

FILE 'HCA' ENTERED AT 10:59:54 ON 03 DEC 2008

L15 154 SEA L12 (L) DISPOS?
L16 892 SEA L12 (L) (FIX OR FIXES OR FIXED OR FIXING# OR FIXAT?
OR REMEDIAT? OR SEQUEST? OR STORE# OR STORING# OR
STORAG?)
L17 820 SEA (SULFUR# OR SULPHUR# OR SULFER# OR SULPHER# OR
S) (2A) DISPOS?
L18 7454 SEA (SULFUR# OR SULPHUR# OR SULFER# OR SULPHER# OR
S) (2A) (FIX OR FIXES OR FIXED OR FIXING# OR FIXAT? OR
REMEDIAT? OR SEQUEST? OR STORE# OR STORING# OR STORAG?)
L19 13 SEA (SULFUR# OR SULPHUR# OR SULFER# OR SULPHER# OR
S) (5A) (CONVERT? OR CONVERS? OR TRANSFORM? OR CHANG?) (5A) (
?SULFAN? OR ?SULPHAN?)
L20 2781 SEA L12 (L) (MOLTEN? OR MELT? OR FUSE# OR FUSING# OR
FUSION?)
L21 14422 SEA (SULFUR# OR SULPHUR# OR SULFER# OR SULPHER# OR
S) (2A) (MOLTEN? OR MELT? OR FUSE# OR FUSING# OR FUSION?)

L22 183 SEA L13 (L) DISPOS?
L23 972 SEA L13 (L) (FIX OR FIXES OR FIXED OR FIXING# OR FIXAT?
OR REMEDIAT? OR SEQUEST? OR STORE# OR STORING# OR
STORAG?)
L24 3198 SEA L13 (L) (MOLTEN? OR MELT? OR FUSE# OR FUSING# OR
FUSION?)
L25 111282 SEA L14 OR (HYDROGEN# OR H)(W) (SULFIDE# OR SULPHIDE#) OR
H2S
L26 42010 SEA ?SULFAN? OR ?SULPHAN?
L27 1228 SEA ?SULFANE? OR ?SULPHANE?
L28 2 SEA (L15 OR L17 OR L22) AND L26
L29 0 SEA (L15 OR L17 OR L22) AND L27
L30 12 SEA (L16 OR L18 OR L23) AND L26
L31 6 SEA (L16 OR L18 OR L23) AND L27
L32 23 SEA (L20 OR L21 OR L24) AND L26
L33 6 SEA (L20 OR L21 OR L24) AND L27
L34 2 SEA L32 AND L25
L35 180564 SEA L12 OR L13
L36 104 SEA L35 AND L25 AND L26
L37 76 SEA L35 AND L25 AND L27
L38 7 SEA L36 AND ((L15 OR L16 OR L17 OR L18 OR L19 OR L20 OR
L21 OR L22 OR L23 OR L24))

FILE 'REGISTRY' ENTERED AT 11:23:31 ON 03 DEC 2008
E CHLORINE/CN

L39 1 SEA CHLORINE/CN
L40 218 SEA (H (L) S)/ELS (L) 2/ELC.SUB
L41 136 SEA L40 AND 1<S
L42 119 SEA L41 NOT (D OR T)/ELS

FILE 'HCA' ENTERED AT 11:26:00 ON 03 DEC 2008

L43 120277 SEA L39 OR CL2 OR (CHLORINE# OR CL)(2A) (GAS## OR
GASEOUS? OR GASIF? OR ATM# OR ATMOS?)
L44 669 SEA L42 OR H2SN+1
L45 345 SEA L35 AND L43 AND L25
L46 9 SEA L45 AND L44
L47 6 SEA L45 AND L26
L48 3 SEA L45 AND L27

FILE 'REGISTRY' ENTERED AT 11:28:04 ON 03 DEC 2008
E SULFUR DICHLORIDE/CN

L49 1 SEA "SULFUR DICHLORIDE"/CN
E HYDROGEN CHLORIDE/CN
L50 1 SEA "HYDROGEN CHLORIDE"/CN

FILE 'HCA' ENTERED AT 11:29:43 ON 03 DEC 2008

L51 2757 SEA L49 OR SCL2 OR CL2S

L52 668673 SEA L50 OR HCL OR (HYDROGEN# OR H) (W) (CHLORIDE# OR MONOCHLORIDE#) OR (HYDROCHLORIC# OR MURIATIC?) (2A) ACID#
L53 12 SEA L45 AND L51
L54 157 SEA L45 AND L52
L55 5 SEA L53 AND L54
L56 6882 SEA (PRODUC? OR PROD# OR GENERAT? OR MANUF? OR MFR# OR CREAT? OR FORM## OR FORMING# OR FORMAT? OR MAKE# OR MADE# OR MAKING# OR FABRICAT? OR SYNTHESI? OR PREPAR? OR PREP#) (2A) (?SULFAN? OR ?SULPHAN?)
L57 24 SEA L36 AND L56
L58 22 SEA L37 AND L56
L59 54 SEA L19 OR L28 OR L30 OR L31 OR L33 OR L34 OR L38 OR L46 OR L47 OR L48 OR L53 OR L55
L60 44 SEA L19 OR L28 OR L31 OR L33 OR L34 OR L38 OR L46 OR L47 OR L48 OR L55
L61 10 SEA (L30 OR L53) NOT L60
L62 20 SEA (L57 OR L58) NOT (L60 OR L61)
L63 72 SEA (L36 OR L37) NOT (L60 OR L61 OR L62)
L64 37 SEA 1808-2003/PY,PRY,AY AND L60
L65 10 SEA 1808-2003/PY,PRY,AY AND L61
L66 20 SEA 1808-2003/PY,PRY,AY AND L62
L67 67 SEA 1808-2003/PY,PRY,AY AND L63
L68 2734 S CLAUS
L69 1626 S L68 AND L35
L70 4 S L69 AND (L44 OR L26)
L71 1247 S L69 AND L25
L72 0 S L71 AND L51
L73 10 S L71 AND L52
L74 1 S L71 AND L43
L75 13 S (L70 OR L73 OR L74) NOT (L64 OR L65 OR L66 OR L67)
L76 12 S 1808-2003/PY,PRY,AY AND L75
L77 4202 S (L12 OR L13) (L) WAST?
L78 9159 S WAST?(2A) (SULFUR# OR SULFER# OR SULPHUR# OR SULPHER# OR
L79 22 S (L77 OR L78) AND L26
L80 5 S (L77 OR L78) AND (L27 OR L44)
L81 21 S (L79 OR L80) NOT (L76 OR L64-L67)
L82 18 S 1808-2003/PY,PRY,AY AND L81

=> FILE HCA

FILE 'HCA' ENTERED AT 11:39:41 ON 03 DEC 2008

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=> D L64 1-37 TI

L64 ANSWER 1 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Methods and compositions for increasing the efficacy of biologically-active ingredients such as antitumor agents

L64 ANSWER 2 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Role of organic mediators in conversion of **hydrogen sulfide** and **sulfanes** to elemental sulfur

L64 ANSWER 3 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Procedure for the conversion of **polysulfane** in **hydrogen sulfide** and sulfur in gas flows resulting in **hydrogen sulfide** synthesis

L64 ANSWER 4 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Production of polymeric sulfur using a cross-linking agent

L64 ANSWER 5 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Determining priority hazardous substances related to hazardous waste sites

L64 ANSWER 6 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Fluorinated ketene dithioacetals. 8.
1,1-Bis(ethylsulfanyl)perfluorobut-1-ene as starting material for the synthesis of substituted 2-(trifluoromethyl)furans and -pyrroles

L64 ANSWER 7 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Stereospecific synthesis and hydrolysis of optically active diaryl(acylamino)(acyloxy)spiro-λ⁴-sulfanes and related cyclic diaryl(acylamino)sulfonium salts

L64 ANSWER 8 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Rhodanese activity and total sulfur content in frog and mouse liver

L64 ANSWER 9 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Thermodynamic aspects of energy conservation by chemolithotrophic sulfur bacteria in relation to the sulfur oxidation pathways

L64 ANSWER 10 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Determining priority hazardous substances related to hazardous waste sites

L64 ANSWER 11 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Photoionization spectra and ionization energies of H₂S, H₂SSH,

SSCl, and HSSCl formed in the reaction system Cl/Cl₂/H₂S

L64 ANSWER 12 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI "Oyster watch": monitoring trace metal and organochlorine concentrations in Sydney's coastal waters

L64 ANSWER 13 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI RI-MP2. First derivatives and global consistency

L64 ANSWER 14 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Copolymerization of elemental sulfur with cyclic(arylene disulfide) oligomers

L64 ANSWER 15 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Oxidative metabolism of inorganic sulfur compounds by bacteria

L64 ANSWER 16 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI A new method for the synthesis of two-equivalent couplers in color photography

L64 ANSWER 17 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Stereocontrolled synthesis of E-homoallylic sulfides with 1,4,5 related chiral centers using the [2,3] sigmatropic rearrangement of sulfonium ylides

L64 ANSWER 18 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Geochemical implications of subaqueous molten sulfur at Yugama Crater Lake, Kusatsu-Shirane Volcano, Japan

L64 ANSWER 19 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Land disposal restrictions for third schedule wastes

L64 ANSWER 20 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Heat capacity, melting enthalpies, and melting temperatures of pure liquid inorganic compounds

L64 ANSWER 21 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Electron correlations in molecules. III. Strength of electron correlations in localized and aromatic bonds or main-group atoms

L64 ANSWER 22 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Equilibrium analysis of combustion/incineration

L64 ANSWER 23 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI γ -Radiolysis of dialkyl, alkyl-aryl and diaryl sulfones. A volatile product study

L64 ANSWER 24 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Reagent hazards

L64 ANSWER 25 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Formation and decomposition of thiosulfate in the ferrous sulfide-sulfur dioxide reaction

L64 ANSWER 26 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Dangerous chemicals reactions. 39. Inorganic oxides

L64 ANSWER 27 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Determination of sulfur in organic compounds by fusion with aluminum powder

L64 ANSWER 28 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI General pseudopotential model for molecules with many valence electrons

L64 ANSWER 29 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Condensation of 1,3-hexasulfur diimide with chlorosulfanes as a route to fused-ring sulfur nitrides

L64 ANSWER 30 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Influence of fungicides on the quality and storageability of apples

L64 ANSWER 31 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Additive function of entropy of boiling, and the prediction of latent heat of vaporization and vapor pressure of liquids

L64 ANSWER 32 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Chemistry of sulfur. XLI. The reaction of hydrogen sulfide with chlorosulfanes, chlorine, or bromine (synthesis of lower sulfanes)

L64 ANSWER 33 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Chemistry of sulfur. XXIII. Preparation of higher bromosulfanes

L64 ANSWER 34 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Reductone. III. The elucidation of the structure of 5-aryl-3-hydroxytetronimides

L64 ANSWER 35 OF 37 HCA COPYRIGHT 2008 ACS on STN
TI Raney metals as desulfurization catalysts. I

L64 ANSWER 36 OF 37 HCA COPYRIGHT 2008 ACS on STN

TI Isomerism of the diazosulphanilic acids and diazo-ethers

L64 ANSWER 37 OF 37 HCA COPYRIGHT 2008 ACS on STN

TI Note on the interaction of bismuth haloid compounds and hydrogen sulphide

=> D L64 2,3,10,18,19 BIB ABS HITSTR HITIND

L64 ANSWER 2 OF 37 HCA COPYRIGHT 2008 ACS on STN

AN 142:137629 HCA Full-text

TI Role of organic mediators in conversion of hydrogen sulfide and sulfanes to elemental sulfur

AU Berberova, N. T.; Fomenko, A. I.; Shinkar, E. V.; Osipova, V. P.; Monyashin, A. O.; Zin'kov, F. E.

CS Astrakhan. Gos. Tekh. Univ., Astrakhan., Russia

SO Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya Tekhnologiya (2003), 46(6), 74-78

CODEN: IVUKAR; ISSN: 0579-2991

PB Ivanovskii Gosudarstvennyi Khimiko-Tekhnologicheskii Universitet

DT Journal

LA Russian

AB It was shown that polysulfanes contained in sulfur are prone to single-electron, irreversible oxidn. in non-aq. media. Radical cations of sulfanes are fragmented with proton elimination. Electrochem. and chem. oxidn. of higher sulfanes to elemental sulfur involves stages of formation of lower polysulfanes. As mediators in transformation of hydrogen sulfide and sulfanes into sulfur, various org. single-electron oxidants were used. Sterically hindered o-benzoquinones and o-semiquinonodiamine platinum and palladium complexes were used as catalysts of sulfur degasification process.

IT 7704-34-9P, Sulfur, preparation

(conversion of hydrogen sulfide and sulfanes to)

RN 7704-34-9 HCA

CN Sulfur (CA INDEX NAME)

S

IT 7783-06-4, Hydrogen sulfide, reactions
(conversion of hydrogen sulfide and sulfanes to elemental sulfur)

RN 7783-06-4 HCA

CN Hydrogen sulfide (H₂S) (CA INDEX NAME)

H₂S

CC 49-1 (Industrial Inorganic Chemicals)
Section cross-reference(s): 72
ST Claus process sulfur purifn hydrogen sulfide
sulfane removal
IT Cyclic voltammetry
Oxidation
Oxidation, electrochemical
(conversion of hydrogen sulfide and
sulfanes to elemental sulfur)
IT Decomposition
(of polysulfanes; conversion of hydrogen
sulfide and sulfanes to elemental sulfur)
IT 7704-34-9P, Sulfur, preparation
(conversion of hydrogen sulfide and
sulfanes to)
IT 7783-06-4, Hydrogen sulfide, reactions
37331-50-3, Sulfane
(conversion of hydrogen sulfide and
sulfanes to elemental sulfur)
IT 3383-21-9 34105-76-5 37780-09-9 329783-64-4 590418-61-4
(in sulfur purifn.; conversion of
hydrogen sulfide and sulfanes to
elemental sulfur)

L64 ANSWER 3 OF 37 HCA COPYRIGHT 2008 ACS on STN
AN 140:273048 HCA Full-text
TI Procedure for the conversion of polysulfane in
hydrogen sulfide and sulfur in gas flows resulting
in hydrogen sulfide synthesis
IN Moeller, Alexander; Boeck, Wolfgang; Taugner, Wolfgang; Heinzel,
Harald; Rautenberg, Stephan
PA Degussa A.-G., Germany
SO Ger. Offen., 2 pp.

CODEN: GWXXBX

DT Patent
LA German

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 10245164	A1	20040408	DE 2002-10245164	

200209
26

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WO 2004028963 A1 20040408 WO 2003-EP9432

200308
26

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG

AU 2003255483 A1 20040419 AU 2003-255483

200308
26

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EP 1542925 A1 20050622 EP 2003-798130

200308
26

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,
SK

BR 2003014663 A 20050802 BR 2003-14663

200308
26

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CN 1684905 A 20051019 CN 2003-823024

200308
26

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CN 1292980 C 20070103
JP 2006500309 T 20060105 JP 2004-538838

200308
26

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RU 2323874 C2 20080510 RU 2005-112707

200308
26

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US 20050265913 A1 20051201 US 2005-529148
200503
24
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US 7326393 B2 20080205
US 20080175778 A1 20080724 US 2007-976717
200710
26
--
PRAI DE 2002-10245164 A 20020926 --
WO 2003-EP9432 W 20030826 --
US 2005-529148 A2 20050324
AB **Polysulfane** (H₂Sx) resulting in **hydrogen sulfide** synthesis are catalytically converted by contacting with e.g. activated carbon, Al₂O₃, SiO₂, or zeolites to give H₂S and S.
IT 7704-34-9P, **Sulfur**, preparation 7783-06-4P
, **Hydrogen sulfide**, preparation
(procedure for conversion of **polysulfane** in
hydrogen sulfide and sulfur in gas flows
resulting in **hydrogen sulfide** synthesis)
RN 7704-34-9 HCA
CN Sulfur (CA INDEX NAME)

S

RN 7783-06-4 HCA
CN Hydrogen sulfide (H₂S) (CA INDEX NAME)

H₂S

IC ICM B01D053-48
ICS B01D053-86
CC 49-2 (Industrial Inorganic Chemicals)
ST **polysulfane** catalytic conversion; **hydrogen sulfide** manuf; sulfur manuf
IT Zeolites (synthetic), processes
(for conversion of **polysulfane** in **hydrogen sulfide** and sulfur in gas flows resulting in **hydrogen sulfide** synthesis)
IT 7440-44-0, Carbon, processes
(activated; for conversion of **polysulfane** in

hydrogen sulfide and sulfur in gas flows
resulting in hydrogen sulfide synthesis)

IT 1344-28-1, Alumina, processes 7631-86-9, Silica, processes
(for conversion of polysulfane in hydrogen
sulfide and sulfur in gas flows resulting in
hydrogen sulfide synthesis)

IT 7704-34-9P, Sulfur, preparation 7783-06-4P
, Hydrogen sulfide, preparation
(procedure for conversion of polysulfane in
hydrogen sulfide and sulfur in gas flows
resulting in hydrogen sulfide synthesis)

IT 37331-50-3, Sulfane
(procedure for conversion of polysulfane in
hydrogen sulfide and sulfur in gas flows
resulting in hydrogen sulfide synthesis)

L64 ANSWER 10 OF 37 HCA COPYRIGHT 2008 ACS on STN
AN 129:241066 HCA Full-text
OREF 129:48971a,48974a
TI Determining priority hazardous substances related to hazardous waste
sites
AU Roney, Nickolette; Henriques, William D.; Fay, Mike; Holler, James
S.; Susten, Sandra S.
CS Public Health Service, Agency for Toxic Substances and Disease
Registry, U.S. Department of Health and Human Services, Atlanta, GA,
30333, USA
SO Toxicology and Industrial Health (1998), 14(4), 521-532
CODEN: TIHEEC; ISSN: 0748-2337
PB Princeton Scientific Publishing Co., Inc.
DT Journal
LA English
AB Hazardous substances on the Comprehensive Environmental Response,
Compensation, and Liability Act were ranked.
IT 7782-50-5, Chlorine, biological studies 7783-06-4,
Hydrogen sulfide, biological studies
15117-53-0, Sulfur-35, biological studies
(detg. priority hazardous substances related to hazardous waste
sites)
RN 7782-50-5 HCA
CN Chlorine (CA INDEX NAME)

C1-C1

RN 7783-06-4 HCA

CN Hydrogen sulfide (H₂S) (CA INDEX NAME)

H₂S

RN 15117-53-0 HCA

CN Sulfur, isotope of mass 35 (CA INDEX NAME)

³⁵S

CC 4-4 (Toxicology)

Section cross-reference(s): 8

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L64 ANSWER 18 OF 37 HCA COPYRIGHT 2008 ACS on STN

AN 122:60377 HCA Full-text

OREF 122:11559a,11562a

TI Geochemical implications of subaqueous **molten**
sulfur at Yugama Crater Lake, Kusatsu-Shirane Volcano, Japan

AU Takano, Bokuichiro; Saitoh, Hiroko; Takano, Etsu

CS Dep. Chem., Univ. Tokyo, Tokyo, 153, Japan

SO Geochemical Journal (1994), 28(3), 199-216

CODEN: GEJOBE; ISSN: 0016-7002

DT Journal

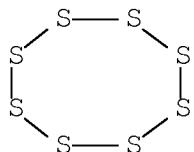
LA English

AB Crater lakes with active subaq. fumaroles often contain **molten sulfur** pools on the lake floor. Volcanic gases passing through the sulfur pools carry hollow spherules of solidified **molten sulfur** to the surface of crater lakes. This sulfur dissolves SO₂ and H₂S gases and releases these gases into the water. The sulfur also contains homocyclic sulfur (cycl. S_x, x = 6-16) and probably **sulfane** monosulfonates. The concn. of cyclic S₇ increases with increasing temp. between 120 and 175°, which is useful to est. the temps. of subaq. **molten sulfur** pools. The gases drastically lower viscosity of the **molten sulfur**. This may be due to blockage of growing long-chain sulfur mols. by the dissolved gases. Thus a jump in viscosity at 159° obsd. for pure sulfur is not likely to be present in subaq. **molten sulfur** at crater lakes. Based on the chem. and morphol. of sulfur slicks, activity of subaq. fumaroles can be divided into four stages (I-IV), each of which may serve for qual. in situ monitoring of crater lakes. At Stage I, no **molten sulfur** pools exist on the

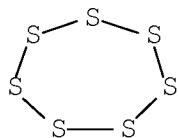
lake floor and fumaroles discharge low temp. gases ($<119^\circ$) contg. only traces of SO₂; at Stage II, subaq. molten sulfur pools ($119^\circ < T < 150^\circ$) are formed, releasing yellow hollow spherules of sulfur with no tails; at Stage III, the fumarolic temp. increases to $>150^\circ$, resulting in an increase in molten sulfur viscosity; and at Stage IV, frequent phreatic or geyser-like eruptions are obsd. The molten sulfur pools are dispersed into pieces on the lake floor at this stage.

IT 10544-50-0, Sulfur, mol. (S8), occurrence 21459-04-1
, Cycloheptasulfur, occurrence
(in molten sulfur in waters as indication of
fumarolic activity at bottom of Yugama Crater Lake,
Kusatsu-Shirane Volcano, Japan)

RN 10544-50-0 HCA
CN Sulfur, mol. (S8) (CA INDEX NAME)



RN 21459-04-1 HCA
CN Sulfur, mol. (S7) (CA INDEX NAME)



IT 7704-34-9, Sulfur, occurrence
(subaq. molten; in waters as indication of fumarolic
activity at bottom of Yugama Crater Lake, Kusatsu-Shirane
Volcano, Japan)

RN 7704-34-9 HCA
CN Sulfur (CA INDEX NAME)

S

CC 53-3 (Mineralogical and Geological Chemistry)
ST sulfur subaq molten Yugama Crater Lake
IT Fumaroles
 (subaq. molten sulfur in waters as indication
 of fumarolic activity at bottom of Yugama Crater Lake,
 Kusatsu-Shirane Volcano, Japan)
IT Waters, natural
 (lake, caldera, subaq. molten sulfur in
 waters as indication of fumarolic activity at bottom of Yugama
 Crater Lake, Kusatsu-Shirane Volcano, Japan)
IT 10544-50-0, Sulfur, mol. (S8), occurrence 21459-04-1
 , Cycloheptasulfur, occurrence
 (in molten sulfur in waters as indication of
 fumarolic activity at bottom of Yugama Crater Lake,
 Kusatsu-Shirane Volcano, Japan)
IT 7704-34-9, Sulfur, occurrence
 (subaq. molten; in waters as indication of fumarolic
 activity at bottom of Yugama Crater Lake, Kusatsu-Shirane
 Volcano, Japan)

L64 ANSWER 19 OF 37 HCA COPYRIGHT 2008 ACS on STN
AN 114:234441 HCA Full-text
OREF 114:39439a,39442a
TI Land disposal restrictions for third schedule wastes
CS United States Environmental Protection Agency, Washington, DC,
20460, USA
SO Federal Register (1991), 56(21), 3864-928, 31 Jan 1991
CODEN: FEREAC; ISSN: 0097-6326
DT Journal
LA English
AB Regulations on prohibition of land disposal of certain hazardous
wastes are amended under the Federal Resource Conservation and
Recovery Act. These amendments include: treatment stds. for certain
solvent wastes, clarification of the term multisource leachate,
regulations for small quantity generators, the definition of inorg.
solid debris, application of the Toxicity Characteristic Leaching
Procedure and the Extn. Procedure in detg. land disposal
restrictions, addn. of acid leaching-chem. pptn. and thermal recovery
of metals to the list of technologies for waste treatment, tables of
regulated hazardous constituent concns. in wastewaters and
nonwastewaters, technol.-based stds. by waste code, and effective
dates of regulation for the specific wastes.
IT 7783-06-4, Hydrogen sulfide, uses and
miscellaneous 18496-25-8, Sulfide
 (hazardous wastes contg., land disposal of, stds. for)
RN 7783-06-4 HCA
CN Hydrogen sulfide (H2S) (CA INDEX NAME)

H₂S

RN 18496-25-8 HCA
CN Sulfide (CA INDEX NAME)

S²⁻

IT 7782-50-5P, Chlorine, uses and miscellaneous
(wastes from mercury cell prodn. of, land disposal of, stds. for)
RN 7782-50-5 HCA
CN Chlorine (CA INDEX NAME)

Cl-Cl

CC 60-5 (Waste Treatment and Disposal)

=> D L65 1-10 TI

L65 ANSWER 1 OF 10 HCA COPYRIGHT 2008 ACS on STN
TI Alternatives for processing metal sulfides without SO_x emissions

L65 ANSWER 2 OF 10 HCA COPYRIGHT 2008 ACS on STN
TI The preparation of chalcogenide glasses in **chlorine**
reactive atmosphere

L65 ANSWER 3 OF 10 HCA COPYRIGHT 2008 ACS on STN
TI Effect of pesticides on most probable number of soil microbes from
tea (*Camellia sinensis*) plantations and uncultivated land enumerated
in enrichment media

L65 ANSWER 4 OF 10 HCA COPYRIGHT 2008 ACS on STN
TI Process for preparing sulphur tetrafluoride by reduction of a
uranium fluoride

L65 ANSWER 5 OF 10 HCA COPYRIGHT 2008 ACS on STN

TI Synthesis and properties of silica with chemically **fixed**
sulfur-containing organic compounds

L65 ANSWER 6 OF 10 HCA COPYRIGHT 2008 ACS on STN

TI Persistence and residues of carbofuran, disulfoton and
endosulfan used for the control of major pests of sorghum
crop

L65 ANSWER 7 OF 10 HCA COPYRIGHT 2008 ACS on STN

TI Reactions of active nitrogen with sulfur compounds

L65 ANSWER 8 OF 10 HCA COPYRIGHT 2008 ACS on STN

TI Fixative for keratin fibers

L65 ANSWER 9 OF 10 HCA COPYRIGHT 2008 ACS on STN

TI Studies on the effect of BZ 55 and D 860 on the pancreatic islet
cells of rat

L65 ANSWER 10 OF 10 HCA COPYRIGHT 2008 ACS on STN

TI Compounds of aluminum, chlorine and sulfur

=> D L66 1-20 TI

L66 ANSWER 1 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI Removal of **polysulfanes** from **hydrogen sulfide** streams

L66 ANSWER 2 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI The **sulfane** sulfur of persulfides is the actual substrate
of the sulfur-oxidizing enzymes from Acidithiobacillus and
Acidiphilium spp.

L66 ANSWER 3 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI Product class 7: 1,2-dithiolium salts and related compounds

L66 ANSWER 4 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI A Chemical Equilibrium Equation of State Model for Elemental Sulfur
and Sulfur-Containing Fluids

L66 ANSWER 5 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI An Experimental Study on the Kinetics of the Formation and
Decomposition of **Sulfanes** in the Sulfur/**H₂S**
System

L66 ANSWER 6 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI Oxidation of **hydrogen sulfide** by a methanol

solution of sulfur dioxide and production of
cyclooctasulfane

L66 ANSWER 7 OF 20 HCA COPYRIGHT 2008 ACS on STN
TI Ab initio study of hypervalent sulfur hydrides as model
intermediates in the interconversion reactions of compounds
containing sulfur-sulfur bonds

L66 ANSWER 8 OF 20 HCA COPYRIGHT 2008 ACS on STN
TI Novel symmetrical and mixed carbamoyl and **aminopolysulfanes**
by reactions of (alkoxydichloromethyl)**polysulfanyl**
substrates with N-methylaniline

L66 ANSWER 9 OF 20 HCA COPYRIGHT 2008 ACS on STN
TI Sulfurization of azines. Part VI. Sulfurization of Py-quinolyl
sulfides

L66 ANSWER 10 OF 20 HCA COPYRIGHT 2008 ACS on STN
TI Separation of dihydrogen polysulfides (**polysulfanes**) using
reversed-phase HPLC

L66 ANSWER 11 OF 20 HCA COPYRIGHT 2008 ACS on STN
TI Sulfur in aqueous solution

L66 ANSWER 12 OF 20 HCA COPYRIGHT 2008 ACS on STN
TI Liquid **hydrogen sulfide** in contact with sulfur

L66 ANSWER 13 OF 20 HCA COPYRIGHT 2008 ACS on STN
TI The chemistry of sulfur. LII. Thiocyanogen trichloride and some of
its derivatives

L66 ANSWER 14 OF 20 HCA COPYRIGHT 2008 ACS on STN
TI Acids of sulfur. XII. On the problem of Wackenroder's solution

L66 ANSWER 15 OF 20 HCA COPYRIGHT 2008 ACS on STN
TI Addition of **hydrogen sulfide** to the nitrile
group of arylsulfonylcyanamides by means of thiosulfuric acid

L66 ANSWER 16 OF 20 HCA COPYRIGHT 2008 ACS on STN
TI Chemistry of sulfur. XL. Thermochemistry of the **sulfanes**:
enthalpies of formation and bond energies

L66 ANSWER 17 OF 20 HCA COPYRIGHT 2008 ACS on STN
TI Chemistry of sulfur. XXX. Preparation of the
sulfanes, H₂S₂, H₂S₃, H₂S₄, and H₂S₅

L66 ANSWER 18 OF 20 HCA COPYRIGHT 2008 ACS on STN

TI The chemistry of sulfur. XXXII. Kinetic investigation of the thermal decomposition of **disulfane** H₂S₂
 L66 ANSWER 19 OF 20 HCA COPYRIGHT 2008 ACS on STN
 TI The chemistry of sulfur. XXIX. The **preparation** of crude **sulfanes**
 L66 ANSWER 20 OF 20 HCA COPYRIGHT 2008 ACS on STN
 TI Chemistry of sulfur. XIX. Electrochemical **preparation** of **sulfanes**, H₂Sn

=> D L66 1,12,17,19 BIB ABS HITSTR HITIND

L66 ANSWER 1 OF 20 HCA COPYRIGHT 2008 ACS on STN
 AN 149:156324 HCA Full-text
 TI Removal of **polysulfanes** from **hydrogen sulfide** streams
 IN Moller, Alexander; Bock, Wolfgang; Taugner, Wolfgang; Heinzel, Harald; Rautenberg, Stephan
 PA Evonik Degussa G.M.B.H., Germany
 SO U.S. Pat. Appl. Publ., 4pp., Cont.-in-part of U.S. Ser. No. 529,148.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20080175778	A1	20080724	US 2007-976717	200710 26
DE	10245164	A1	20040408	DE 2002-10245164	200209 26
WO	2004028963	A1	20040408	WO 2003-EP9432	200308 26

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
 LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
 NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,

SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG

US 20050265913 A1 20051201 US 2005-529148

200503

24

<--

US 7326393 B2 20080205
PRAI DE 2002-10245164 A 20020926 <--
WO 2003-EP9432 W 20030826 <--
US 2005-529148 A2 20050324

AB **Polysulfanes** are removed from crude gas formed during the prodn. of **hydrogen sulfide** from sulfur and hydrogen by passing the crude gas through a wash system where it is brought into contact with a wash soln. of water or methanol; and collecting the purified gas from the wash soln. The washing soln. can contain 0.5-20 wt.% of an alkali or alk. earth hydroxide or oxide, org. amine, amino alc., or ammonia. The wash system is a jet washer. The process further includes a second wash step in which the purified gas is passed through a countercurrent washer contg. an aq. or methanolic soln. The purified gas may also be further treated by adsorption.

IT 7783-06-4P, **Hydrogen sulfide** (
H₂S), preparation
(removal of **polysulfanes** from **hydrogen sulfide** streams)

RN 7783-06-4 HCA

CN Hydrogen sulfide (H₂S) (CA INDEX NAME)

H₂S

IT 7704-34-9, **Sulfur**, reactions
(removal of **polysulfanes** from **hydrogen sulfide** streams)

RN 7704-34-9 HCA

CN Sulfur (CA INDEX NAME)

S

INCL 423242400; 423243010; 423243080; 423243060
CC 49-8 (Industrial Inorganic Chemicals)
Section cross-reference(s): 48
ST polysulfane removal hydrogen sulfide
purifn jet washing adsorption
IT Alcohols, processes
(amino, washing fluid contg.; removal of polysulfanes
from hydrogen sulfide streams)
IT Adsorption
Adsorption apparatus
Scrubbers
Wet scrubbing
(removal of polysulfanes from hydrogen
sulfide streams)
IT Alkali metal hydroxides
Alkaline earth hydroxides
Amines, processes
(washing fluid contg.; removal of polysulfanes from
hydrogen sulfide streams)
IT 7440-44-0, Carbon, uses
(activated, adsorbent; removal of polysulfanes from
hydrogen sulfide streams)
IT 7783-06-4P, Hydrogen sulfide (H₂S), preparation
(removal of polysulfanes from hydrogen
sulfide streams)
IT 1333-74-0, Hydrogen, reactions 7704-34-9, Sulfur,
reactions
(removal of polysulfanes from hydrogen
sulfide streams)
IT 50864-71-6, Hydrogen polysulfide
(removal of polysulfanes from hydrogen
sulfide streams)
IT 102-71-6, Triethanolamine, processes 1310-58-3, Potassium
hydroxide, processes 1310-73-2, Sodium hydroxide, processes
7664-41-7, Ammonia, processes
(washing fluid contg.; removal of polysulfanes from
hydrogen sulfide streams)
IT 67-56-1, Methanol, uses
(washing fluid; removal of polysulfanes from
hydrogen sulfide streams)

L66 ANSWER 12 OF 20 HCA COPYRIGHT 2008 ACS on STN
AN 72:83443 HCA Full-text
OREF 72:15203a,15206a
TI Liquid hydrogen sulfide in contact with sulfur

AU Smith, Jerry Joseph; Jensen, Dan; Meyer, Beat
CS Chem. Dep., Univ. of Washington, Seattle, WA, USA
SO Journal of Chemical and Engineering Data (1970), 15(1),
144-6
CODEN: JCEAAX; ISSN: 0021-9568
DT Journal
LA English
AB S in contact with liq. H₂S at equil. pressure 10-6 was studied between -81 and 120°. The solv. of solid S is 5 + 10-6 mole of S₈ per g of H₂S at -80° and 5 + 10-5 at 80°. Over this range, log solv. vs. 1/T gives a straight line. From a least squares anal. of the data, ΔHS = 2.1 ± 0.1 kcal/mole. From 80 to -80°, the solv. can be represented by log S = (-4.52 + 102/T) -3.00. In contact with liq. H₂S, S m. 98°, below the crit. point of H₂S. The m.p. depression of S is about 20°, indicating that H₂S dissolves appreciably in solid S. NMR spectra show that no detectable chem. reaction occurs up to 120°. Photolysis yields a white, finely powd. ppt., probably photosulfur, which redissolves or converts to orthorhombic S within 4 weeks after irradn.; no sulfanes are formed. Slow reaction occurs between liq. S and gaseous H₂S above 150°.
IT 7783-06-4, properties
(solv. in, of sulfur)
RN 7783-06-4 HCA
CN Hydrogen sulfide (H₂S) (CA INDEX NAME)

H₂S

IT 7704-34-9, properties
(solv. of, in liq. hydrogen sulfide)
RN 7704-34-9 HCA
CN Sulfur (CA INDEX NAME)

S

CC 68 (Phase Equilibria, Chemical Equilibria, and Solutions)
ST hydrogen sulfide S system; sulfur H₂sulfide system
IT Photolysis
(of sulfur, in contact with liq. hydrogen sulfide)
IT Heat of solution

(of sulfur, in hydrogen sulfide)

IT 7783-06-4, properties
(soly. in, of sulfur)

IT 7704-34-9, properties
(soly. of, in liq. hydrogen sulfide)

L66 ANSWER 17 OF 20 HCA COPYRIGHT 2008 ACS on STN
AN 51:61453 HCA Full-text

OREF 51:11142e-g

TI Chemistry of sulfur. XXX. Preparation of the sulfanes, H₂S₂, H₂S₃, H₂S₄, and H₂S₅

AU Feher, F.; Laue, W.; Winkhaus, G.

CS Univ. Cologne, Germany

SO Zeitschrift fuer Anorganische und Allgemeine Chemie (1956), 288, 113-22

CODEN: ZAACAB; ISSN: 0044-2313

DT Journal

LA Unavailable

AB cf. C.A. 51, 10204e. The procedure for the prepn. of H₂S₂, H₂S₃, H₂S₄, and H₂S₅ by the cracking of raw sulfanes at pressures of 10-15 mm. Hg is described. The procedures for purification are also discussed. The ds. are 1.334, 1.491, 1.582, 1.644 (all ± 0.001) g./cc., resp. The kinematic viscosities are 0.00462, 0.00886, 0.0166, and 0.0336 (all ± 0.0001) Stokes, resp. The dynamic viscosities are 0.00616, 0.1321, 0.0263, and 0.0552 (all ± 0.0001) poise, resp. The n₂₀D values are 1.631, 1.729, 1.791, and 1.836 (all ± 0.001), resp. Raman lines are listed.

IT 7704-34-9, Sulfur
(chemistry of)

RN 7704-34-9 HCA

CN Sulfur (CA INDEX NAME)

S

CC 6 (Inorganic Chemistry)

IT Spectra, Raman
(of sulfane derivs.)

IT Hydrogen sulfides
(prepn. and properties of H₂S₂, H₂S₃, H₂S₄ and H₂S₅)

IT 7704-34-9, Sulfur
(chemistry of)

L66 ANSWER 19 OF 20 HCA COPYRIGHT 2008 ACS on STN
AN 51:46252 HCA Full-text

OREF 51:8566a-c
TI The chemistry of sulfur. XXIX. The preparation of crude sulfanes
AU Feher, F.; Laue, W.
CS Univ. Cologne, Germany
SO Zeitschrift fuer Anorganische und Allgemeine Chemie (1956), 288, 103-12
CODEN: ZAACAB; ISSN: 0044-2313
DT Journal
LA Unavailable
AB cf. C.A. 43, 3156f; 44, 965g; 51, 3337g. The procedure for the prepn. of crude sulfane mixts. by the addn. of HCl to Na₂Sx is carried out on a continuous basis. The influence of various factors on the yield and on the compn. of the raw oils is considered, with the compn. varying from about H₂S_{4.5} to H₂S₇, depending upon the compn. of the H₂Sx. Equipment for the production of 2 kg. of raw sulfanes per day is described. In one expt., 300 g. S, 1200 g. Na₂S·9H₂O, and 500 ml. H₂O are mixed together on a water bath until all S is dissolved. The mixt. is cooled to -20° and 1:1 HCl (cooled to -10°) is added. After the reaction is complete, the oil is sep'd., washed with HCl, and finally dried with P₂O₅. The yield is 300-350 g. of raw sulfanes with the compn. H₂S₅-H₂S_{5.5}.
IT 7704-34-9, Sulfur
(chemistry of)
RN 7704-34-9 HCA
CN Sulfur (CA INDEX NAME)

S

CC 6 (Inorganic Chemistry)
IT Hydrogen sulfides
(prepn. of H₂Sx)
IT 7704-34-9, Sulfur
(chemistry of)

=> D L67 1-67 TI

L67 ANSWER 1 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Calculation of the visible-UV absorption spectra of hydrogen sulfide, bisulfide, polysulfides, and As and Sb sulfides, in aqueous solution

L67 ANSWER 2 OF 67 HCA COPYRIGHT 2008 ACS on STN

TI Novel species for the sulfur zoo: isomers of S8

L67 ANSWER 3 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Thiosulfoxides ($X_2S=S$) and **disulfanes** ($XSSX$): first observation of organic thiosulfoxides

L67 ANSWER 4 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Sulfur isotope fractionation during bacterial reduction and disproportionation of thiosulfate and sulfite

L67 ANSWER 5 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI The behavior of metals and sulfur during the formation of hydrothermal mercury-antimony-arsenic mineralization, Uzon Caldera, Kamchatka, Russia

L67 ANSWER 6 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Carbon black and its manufacture process and rubber mixtures containing the same

L67 ANSWER 7 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI How Unstable are Thiosulfoxides? An ab Initio MO Study of Various **Disulfanes** RSSR ($R = H, Me, Pr, All$), Their Branched Isomers R2SS, and the Related Transition States

L67 ANSWER 8 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Low-temperature addition of hydrogen polysulfides to olefins: formation of 2,2'-dialkyl polysulfides from alk-1-enes and cyclic (poly)sulfides and polymeric organic sulfur compounds from α, ω -dienes

L67 ANSWER 9 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Experimental study of the system water-**hydrogen sulfide**-crystalline sulfur under low-temperature hydrothermal conditions

L67 ANSWER 10 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Kinetics of isotope exchange reactions involving intra- and intermolecular reactions: I. Rate law for a system with two chemical compounds and three exchangeable atoms

L67 ANSWER 11 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI The possible role of thiosulfate in the precipitation of sulfur-34-rich barite in some Mississippi Valley-type deposits

L67 ANSWER 12 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI An ab initio study of the **polysulfane** series **hydrogen sulfide** (H_2S_2 to H_2S_6) and of the sulfur

octamer

L67 ANSWER 13 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Determination of sulfide in sewage effluents using a new spectrophotometric method

L67 ANSWER 14 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Application of secondary ion mass spectrometry (SIMS) to the study of sulfur crosslinks in isoprene rubber, natural rubber, and SBR vulcanizates

L67 ANSWER 15 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Chalcogen metallocene compounds. Reaction of zirconocene and hafnocene dihydrides with sulfur, selenium, and tellurium

L67 ANSWER 16 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Cadmium polysulfide complexes, $[Cd(Sx)(Sy)]^{2-}$: syntheses, crystal and molecular structures, and cadmium-113 NMR studies

L67 ANSWER 17 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Novel synthetic routes to disulfur and disulfur monoxide ligands: nucleophilic attack at coordinated imino-oxo- λ^4 -**sulfanes**

L67 ANSWER 18 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Mineral composition and geochemistry of rocks with bacterial overgrowths from submarine hydrothermal deposits

L67 ANSWER 19 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Investigations on microbial sulfur respiration. 1. Activation and reduction of elemental sulfur in several strains of eubacteria

L67 ANSWER 20 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Sulfur isotope exchange reactions in the aqueous system: thiosulfate-sulfide-sulfate at hydrothermal temperature

L67 ANSWER 21 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Bond dissociation energies in **sulfanes**: an ab initio study

L67 ANSWER 22 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Composition of crude **sulfane** oil, identification of the **sulfanes** H₂S₉ to H₂S₃₅

L67 ANSWER 23 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Semimicro methods for analysis of labile sulfide and of labile sulfide plus **sulfane** sulfur in unusually stable

iron-sulfur proteins

L67 ANSWER 24 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Organometallic sulfur complexes. 1. Syntheses, structures, and characterizations of organoiron sulfane complexes
 $(\mu\text{-Sx})[(\eta^5\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})_2]_2$ ($x = 1\text{-}4$)

L67 ANSWER 25 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Origin of the labile sulfide in the iron-sulfur proteins of *Escherichia coli*

L67 ANSWER 26 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI The biosynthetic origin of the sulfur atoms in lipoic acid

L67 ANSWER 27 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Stable isotope fractionation by *Clostridium pasteurianum*. 4. Sulfur isotope fractionation during enzymatic trithionate, thiosulfate and sulfite reductions

L67 ANSWER 28 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Ab initio Hartree-Fock-Slater calculations of polysulfanes H_2Sn ($n = 1\text{-}4$) and the ions HSn^- and Sn^{2-}

L67 ANSWER 29 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI On the possible roles of gaseous sulfur and sulfanes in the atmosphere of Venus

L67 ANSWER 30 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Sulfur isotope fractionation by *Salmonella heidelberg*: inverse isotope effects during growth on high concentrations of sodium sulfite

L67 ANSWER 31 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Thiosulfate formation and associated isotope effects during sulfite reduction by *Clostridium pasteurianum*

L67 ANSWER 32 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Chemistry of phosphorus. 59. Synthesis and structure of 1,2,4-triphenylcyclo-3,5-dithia-1,2,4-triphosphane-1-thione

L67 ANSWER 33 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Mechanism for desulfuration of sulfur-containing substances on Raney nickel and iron catalysts

L67 ANSWER 34 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI High dose rate radiolysis of hydrogen sulfide. Sulfur as an electron scavenger

L67 ANSWER 35 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Studies of sulfur in liquid **hydrogen sulfide** and
sulfur dioxide and the use of **chlorosulfanes** in the study
of elemental sulfur

L67 ANSWER 36 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Thermal decomposition of tri- and **tetrasulfanes**

L67 ANSWER 37 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Rapid method for determining sulfur in organic substances

L67 ANSWER 38 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Thiolysis of **sulfuryl chloride**

L67 ANSWER 39 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Ultramicro and trace analysis of organic substances. I.
Determination of very small quantities of substances of low
volatility based upon their contents of fluorine, sulfur, or
phosphorus

L67 ANSWER 40 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Determination of sulfur compounds in sulfate turpentine

L67 ANSWER 41 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Organic sulfur compounds in the kraft pulping process

L67 ANSWER 42 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Acids of sulfur. V. Degradation of chainlike sulfur compounds

L67 ANSWER 43 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Bond energies and the interactions between next-nearest neighbors.
I. Saturated hydrocarbons, diamond, **sulfanes**, S₈, and
organic sulfur compounds

L67 ANSWER 44 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Acids of sulfur. XVI. Iodometric and colorimetric determination of
sulfane, elemental sulfur, and **sulfane-sulfur**
mixtures

L67 ANSWER 45 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI The chemistry of sulfur. XLVIII. The reaction of **sulfanes**
with chloral

L67 ANSWER 46 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Contributions to the chemistry of sulfur. XLIX. The homologous
series of **cyanosulfanes**, Sn(CN)₂

L67 ANSWER 47 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Chemistry of sulfur. XLVII. The molar heat of gaseous **disulfane** and the barrier potential of the inner rotation

L67 ANSWER 48 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Chemistry of sulfur. XLIV. Enthalpies of vaporization, vapor pressures, boiling points, critical temperatures and pressures, and Trouton's constants of **sulfanes**

L67 ANSWER 49 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Chemistry of sulfur. XXXIX. The viscosities of the **sulfanes**

L67 ANSWER 50 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Chemistry of sulfur. XXXVI. The reaction of definite higher alkali sulfides with anhydrous formic acid

L67 ANSWER 51 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI The chemistry of sulfur. XXXIV. The molar volumes and molar refractivities of the **sulfanes** and their dependence on chain length

L67 ANSWER 52 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Sulfur. XXVII. Molecular distribution in the condensation reaction between **sulfanes** and **halosulfanes**

L67 ANSWER 53 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Semimicrodetermination of sulfur in cystine and methionine

L67 ANSWER 54 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Metabolite analogs. IV. Preparation of some sulfur-containing benzimidazoles with substituents on the 4(7)- and 6(5)-positions

L67 ANSWER 55 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Chemistry of sulfur. XXII. The reaction between **sulfanes** H₂Sn and **chlorosulfanes** SmCl₂

L67 ANSWER 56 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Chemistry of sulfur. XVI. The nomenclature of chaintype sulfur compounds

L67 ANSWER 57 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Semimicromethod for determining sulfur in organic compounds

L67 ANSWER 58 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Synthesis of physiologically active compounds labeled with sulfur35

L67 ANSWER 59 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Intermediary sulfur metabolism. II. Cystine-balance experiments with Escherichia coli

L67 ANSWER 60 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Some aspects of the action of sulfonamides. I. Binding of S³⁵ labeled sulfanilamide by Escherichia coli

L67 ANSWER 61 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI The influence of small quantities of sulfur and cyanogen compounds on the velocity of oxidation of ferrous ions to ferric ions

L67 ANSWER 62 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Biguanide derivatives

L67 ANSWER 63 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Microdetermination of sulfur in organic molecules by the hydrogenation method. I. Microchemical determination of sulfur

L67 ANSWER 64 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Sulfur studies. XVIII. Sulfonium derivatives of p-phenylphenacyl bromide

L67 ANSWER 65 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI Determination of sulfur in organic compounds by hydrogenation

L67 ANSWER 66 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI General method for determining sulfur in organic materials

L67 ANSWER 67 OF 67 HCA COPYRIGHT 2008 ACS on STN
TI The determination of antimony in ores

=> D L67 55 BIB ABS HITSTR HITIND

L67 ANSWER 55 OF 67 HCA COPYRIGHT 2008 ACS on STN
AN 50:27155 HCA Full-text
OREF 50:5442e-g
TI Chemistry of sulfur. XXII. The reaction between sulfanes H₂Sn and chlorosulfanes SmCl₂
AU Feher, F.; Laue, W.; Kraemer, J.
CS Univ. Cologne, Germany
SO Zeitschrift fuer Anorganische und Allgemeine Chemie (1955), 281, 151-60
CODEN: ZAACAB; ISSN: 0044-2313
DT Journal
LA Unavailable

AB cf. C.A. 49, 12169i. The ds., refractive indexes, viscosities at 20°, and surface tensions at 20° are given for SnCl₂ with n = 1, 2, 3, 4, 5.1, 7.5, and 14.2. The samples with n > 2 were not exhaustively purified. The mol. vol., mol. refraction, and parachor for SnCl₂ with n = 1, 2, 3, and 4, have approx. const. increments through the series. This suggests that the S atoms are equiv. and supports the suggested chain structure.

IT 7704-34-9, Sulfur
(chemistry of)
RN 7704-34-9 HCA
CN Sulfur (CA INDEX NAME)

S

CC 6 (Inorganic Chemistry)
IT Hydrogen sulfides
(reaction of H₂Sx with SmCl₂)
IT 7704-34-9, Sulfur
(chemistry of)

=> D L76 1-12 TI

L76 ANSWER 1 OF 12 HCA COPYRIGHT 2008 ACS on STN
TI Production of insoluble sulfur or soluble sulfur and insoluble sulfur mixture and/or their mixtures with hydrocarbon oil

L76 ANSWER 2 OF 12 HCA COPYRIGHT 2008 ACS on STN
TI A high capacity manganese-based sorbent for regenerative high temperature desulfurization with direct sulfur production.
Conceptual process application to coal gas cleaning

L76 ANSWER 3 OF 12 HCA COPYRIGHT 2008 ACS on STN
TI A catalyst based on titanium and method for its preparation

L76 ANSWER 4 OF 12 HCA COPYRIGHT 2008 ACS on STN
TI Processing of municipal plastic wastes by gasification

L76 ANSWER 5 OF 12 HCA COPYRIGHT 2008 ACS on STN
TI Process for removing sulfur compounds

L76 ANSWER 6 OF 12 HCA COPYRIGHT 2008 ACS on STN
TI Process for purifying high-temperature reducing gases and composite power plant with coal gasification

L76 ANSWER 7 OF 12 HCA COPYRIGHT 2008 ACS on STN
TI Processing of sulfate-containing wastewater

L76 ANSWER 8 OF 12 HCA COPYRIGHT 2008 ACS on STN
TI Manufacture of catalysts for the conversion of **hydrogen sulfide** and/or sulfur dioxide, the catalysts obtained, and their use

L76 ANSWER 9 OF 12 HCA COPYRIGHT 2008 ACS on STN
TI Removal of the halides in desorbed gas in boiler flue gas dry desulfurization

L76 ANSWER 10 OF 12 HCA COPYRIGHT 2008 ACS on STN
TI The **Claus** process: thermodynamics of **sulphane** production

L76 ANSWER 11 OF 12 HCA COPYRIGHT 2008 ACS on STN
TI Iron chloride activated oxidation of sulfide ores

L76 ANSWER 12 OF 12 HCA COPYRIGHT 2008 ACS on STN
TI Reduction of metal sulfides occurring in a refining process

=> D L76 1,5,10 BIB ABS HITSTR HITIND

L76 ANSWER 1 OF 12 HCA COPYRIGHT 2008 ACS on STN
AN 142:394502 HCA Full-text
TI Production of insoluble sulfur or soluble sulfur and insoluble sulfur mixture and/or their mixtures with hydrocarbon oil
IN Macho, Vendelin; Jurecek, Ludovit; Komora, Ladislav; Kavala, Miroslav; Jurecekova, Emilia; Vojdasova, Viera
PA VUP, A. S., Slovakia
SO Slovakia, 9 pp.
CODEN: SLXXFO
DT Patent
LA Slovak
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	SK 283885	B6	20040406	SK 1998-1366	19981001

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PRAI SK 1998-1366 19981001 <--

AB Insol. S or a mixt. of sol. S and insol. S and/or their mixts. with hydrocarbon oils are produced by using oxidn.-redn. reactions of low-mol. S compds. (e.g., CS₂, COS, H₂S) in the Claus process. After the partial combustion of the low-mol. S compds. or their mixts. with org. compds., a reaction gas with the SO₂/H₂S mol. ratio of 1:(2-2.5) is cooled to -10 to +50° and led to an aq. or aq.-alc. medium. Insol. S is withdrawn, ground and/or ground and formulated with oil and/or sol. S and/or insol. S. In another option, the molten S from the Claus process is held ≥3 min at 200-300°, modified with 0.1-1.5 wt.% stabilizer, and quenched by contacting a cooled surface at -30 to +30° or by charging into an aq. and/or colloidal soln. at -10 to +40°. After drying, the product is disintegrated and/or selectively extd. to remove sol. S, dried, disintegrated, and packaged and/or formulated with hydrocarbon oil. The method is suitable for liquidation of H₂S and other S compds. from hydrodesulfurization of petroleum fractions and residues. The insol. S is suitable as a vulcanization agent.

IT 7783-06-4, Hydrogen sulfide, reactions

(in prodn. of insol. sulfur or sol. sulfur and insol. sulfur mixt. and/or their mixts. with hydrocarbon oil)

RN 7783-06-4 HCA

CN Hydrogen sulfide (H₂S) (CA INDEX NAME)

H₂S

IT 7647-01-0, Hydrochloric acid, uses

(in prodn. of insol. sulfur or sol. sulfur and insol. sulfur mixt. and/or their mixts. with hydrocarbon oil)

RN 7647-01-0 HCA

CN Hydrochloric acid (CA INDEX NAME)

HCl

IT 7704-34-9P, Sulfur, preparation

(prodn. of insol. sulfur or sol. sulfur and insol. sulfur mixt. and/or their mixts. with hydrocarbon oil)

RN 7704-34-9 HCA

CN Sulfur (CA INDEX NAME)

S

IT 7782-50-5, Chlorine, uses
(stabilizer in prodn. of insol. sulfur or sol. sulfur and insol.
sulfur mixt. and/or their mixts. with hydrocarbon oil)
RN 7782-50-5 HCA
CN Chlorine (CA INDEX NAME)

C1-C1

IC ICM C01B017-02
CC 49-1 (Industrial Inorganic Chemicals)
Section cross-reference(s): 39, 51
ST insol sulfur prodn Claus process
IT 75-15-0, Carbon disulfide, reactions 463-58-1, Carbonyl sulfide
7446-09-5, Sulfur dioxide, reactions 7783-06-4,
Hydrogen sulfide, reactions
(in prodn. of insol. sulfur or sol. sulfur and insol. sulfur
mixt. and/or their mixts. with hydrocarbon oil)
IT 56-81-5, Glycerol, uses 57-55-6, Propylene glycol, uses 64-17-5,
Ethanol, uses 64-18-6, Formic acid, uses 64-19-7, Acetic acid,
uses 107-21-1, Ethylene glycol, uses 111-46-6, Diethylene
glycol, uses 7647-01-0, **Hydrochloric**
acid, uses 7664-38-2, Phosphoric acid, uses 7664-93-9,
Sulfuric acid, uses 7782-99-2, Sulfurous acid, uses 9002-89-5,
Polyvinyl alcohol 9004-34-6D, Cellulose, ether 25265-71-8,
Dipropylene glycol 25322-68-3, Polyethylene glycol
(in prodn. of insol. sulfur or sol. sulfur and insol. sulfur
mixt. and/or their mixts. with hydrocarbon oil)
IT 7704-34-9P, Sulfur, preparation
(prodn. of insol. sulfur or sol. sulfur and insol. sulfur mixt.
and/or their mixts. with hydrocarbon oil)
IT 57-11-4, Stearic acid, uses 7553-56-2, Iodine, uses 7726-95-6,
Bromine, uses 7782-50-5, Chlorine, uses 7791-25-5,
Sulfuryl chloride (SO₂Cl₂)
(stabilizer in prodn. of insol. sulfur or sol. sulfur and insol.
sulfur mixt. and/or their mixts. with hydrocarbon oil)

L76 ANSWER 5 OF 12 HCA COPYRIGHT 2008 ACS on STN
AN 119:209535 HCA Full-text
OREF 119:37211a,37214a
TI Process for removing sulfur compounds
IN Lowery, Richard E.; Engelbert, Donald R.

PA Phillips Petroleum Co., USA

SO U.S., 10 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 5219542	A	19930615	US 1991-727780	199107 10

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PRAI US 1991-727780 19910710 <--

AB S compds. including H₂S, SO₂, COS, and CS₂ are removed from S contaminated fluid streams using an absorption compn. contg. 60-90 ZnO, 10-30 zinc phosphate, and .1torsim.30% by wt. alumina. The absorption compn. also contains an acid selected from the group consisting of HNO₃, AcOH, H₂SO₄, and HCl. The process is suitable for the recovery of S from a Claus plant effluent.

IT 7647-01-0, Hydrochloric acid, uses

(absorbent contg., for sulfur compd. removal from contaminated fluid streams)

RN 7647-01-0 HCA

CN Hydrochloric acid (CA INDEX NAME)

HCl

IT 7704-34-90, Sulfur, compds. 7783-06-4,
Hydrogen sulfide (H₂S), miscellaneous

(removal of, from contaminated fluid streams, by absorption, with zinc oxide and zinc phosphate and alumina contg. compn.)

RN 7704-34-9 HCA

CN Sulfur (CA INDEX NAME)

S

RN 7783-06-4 HCA

CN Hydrogen sulfide (H₂S) (CA INDEX NAME)

H₂S

IC ICM C01B017-16
ICS C01B031-20; C01B017-20; B01J008-00
INCL 423230000
CC 59-4 (Air Pollution and Industrial Hygiene)
Section cross-reference(s): 49
IT 10103-46-5, Calcium phosphate 64-19-7, Acetic acid, uses
7647-01-0, Hydrochloric acid, uses
7664-93-9, Sulfuric acid, uses 7697-37-2, Nitric acid, uses
(absorbent contg., for sulfur compd. removal from contaminated
fluid streams)
IT 75-15-0, Carbon sulfide (CS₂), miscellaneous 463-58-1, Carbonyl
sulfide 7446-09-5, Sulfur dioxide, miscellaneous
7704-34-9D, Sulfur, compds. 7783-06-4,
Hydrogen sulfide (H₂S), miscellaneous
(removal of, from contaminated fluid streams, by absorption, with
zinc oxide and zinc phosphate and alumina contg. compn.)
L76 ANSWER 10 OF 12 HCA COPYRIGHT 2008 ACS on STN
AN 88:24975 HCA Full-text
OREF 88:3999a, 4002a
TI The Claus process: thermodynamics of sulphane
production
AU Kerr, Richard K.; Berlie, E. M.
CS West. Res. and Dev. Ltd., Calgary, AB, Can.
SO Energy Processing/Canada (1977), 69(6), 48-51
CODEN: EPCADS; ISSN: 0319-5759
DT Journal
LA English
AB The thermodn. are discussed of sulfane (H₂Sx) formation in Claus
plants for reaction furnaces, catalytic converters, and S condensers.
Equil. formation of H₂Sx in the system followed by its dissoln. in
condensed S downstream is sufficient to account for concns. of
≤14,000 ppm H₂Sx dissolved in S.
IT 7704-34-9P, preparation
(manuf. of, thermodn. of sulfane formation in)
RN 7704-34-9 HCA
CN Sulfur (CA INDEX NAME)

S

CC 49-1 (Industrial Inorganic Chemicals)
Section cross-reference(s): 69
ST sulfane formation Claus process
IT 50864-71-6P
(formation of, thermodn. of, in Claus process)
IT 7704-34-9P, preparation
(manuf. of, thermodn. of sulfane formation in)

=> D L82 1-18 TI

L82 ANSWER 1 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Effectiveness of natural treatment in a wastewater irrigation district of the Mexico City region: a synoptic field survey.
[Erratum to document cited in CA132:112301]

L82 ANSWER 2 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Effectiveness of natural treatment in a wastewater irrigation district of the Mexico City region: a synoptic field survey

L82 ANSWER 3 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Gasification as an alternative method for the destruction of sulfur containing waste (ChemChar process)

L82 ANSWER 4 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Sulchem process for treatment of chemical weapons-related wastes

L82 ANSWER 5 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Determination of organically bound sulfur in waste samples

L82 ANSWER 6 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Oxygen bomb combustion ion chromatography for elemental analysis of heteroatoms in fuel and wastes development

L82 ANSWER 7 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Methodology for selecting substances for the National Exposure Registry

L82 ANSWER 8 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Pesticide chemicals manufacturing category effluent limitations guidelines, pretreatment standards, and new source performance standards

L82 ANSWER 9 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Determination of the content of noxious oxides in cement industry

waste gases

L82 ANSWER 10 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Development of a thermal stability-based ranking of hazardous organic compound incinerability

L82 ANSWER 11 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Odorant for generator gas

L82 ANSWER 12 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Purification of wastewater from thiokol production

L82 ANSWER 13 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Recovery of sulfuric acid in waste acid

L82 ANSWER 14 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Preparation of commercially important organic sulfur compounds from pulp industry waste products

L82 ANSWER 15 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Colorimetric determination of hydrogen sulfide and methanethiol in industrial effluents

L82 ANSWER 16 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Improvement of methods of collecting sulfate turpentines and Sulfan

L82 ANSWER 17 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Removing and recovering sulfur dioxide from waste gases

L82 ANSWER 18 OF 18 HCA COPYRIGHT 2008 ACS on STN
TI Sulfur determination in sulfite waste liquor and organic compounds. Potassium permanganate method